



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,620	01/22/2002	Mitchell J. Rackovan	AVERP2544USA	7070

7590 10/31/2002  
Heidi A. Boehlefeld  
Renner, Otto, Boisselle & Sklar, LLP  
1621 Euclid Avenue, Nineteenth Floor  
Cleveland, OH 44115

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 10/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

XB

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/054,620	RACKOVAN ET AL.	
	Examiner	Art Unit	
	Christopher P Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-8 and 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 11 and 15, the limitation "soft polar additive" is indefinite because it is not understood what is meant by soft or what soft is referring to. It is also not understood how soft, soft is. Therefore, a "soft polar additive" defines any polar additive.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another

Art Unit: 1772

who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Idlas (USPN 5,759,648).

Idlas teaches a halogen-free, multi-layered heat shrink film comprising a first layer or a skin layer comprised of at least 50% by weight of a copolymer of propene and at least one  $\alpha$ -olefin selected from the group consisting of ethylene, butene-1, hexane, and mixtures thereof, having a propene content of at least 60% (col.5, 1.48-56). The second layer or core layer is comprised of a blend of at least 10% of a first copolymer of ethylene and at least one  $\alpha$ -olefin containing from about 4 to about 8 carbon atoms and at least 10% of a second copolymer of ethylene with from 4-18% of a vinyl ester or alkyl acrylate, and at least 10% of an anhydride-modified third copolymer of

Art Unit: 1772

ethylene with at least one  $\alpha$ -olefin, a vinyl ester or an alkyl acrylate, and optionally from 0-30% of a fourth copolymer of ethylene and a least one  $\alpha$ -olefin containing from about 3 to about 8 carbon atoms. The second layer may also optionally contain a propene copolymer as described for the first layer (col.5, 1.56 to col.6, 1.2). A preferred embodiment of the film has at least 20%, more preferably 30% or higher, shrinkage values in at least one direction at 90°C or less, and preferably at least 25% in both directions (col.7, 1.3-14). An additional layer, referred to as the fifth layer in the reference, includes at least 30wt% of a first copolymer of ethylene with at least one  $\alpha$ -olefin containing about 4 to about 8 carbon atoms and at least 10% of a second copolymer of ethylene with from 4 to 18wt% of a vinyl ester (acetate) or alkyl acrylate (col.37, 1.41-51). Also in the fifth layer is ethylene vinyl acetate, which is a soft polar additive (col.20, 1.49-51). It is preferred that the fifth layer will comprise the exterior surface of the tube or bag and will be manipulated by machines such as for printing (col8, 1.41-51), which suggests that the film is printed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which

Art Unit: 1772

forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 3-8 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Idlas (5,759,648).

Idlas teaches all that is claimed in claim 1, but fails to specifically teach a butene content of 3% to about 20%. Since Idlas teaches that the second layer may also contain a propene copolymer as described for the first layer, which is at least 50% by weight of a copolymer of propene and at least one  $\alpha$ -olefin selected from ethylene, butene-1, hexane, or mixtures, a butene content between about 3 to about 20% of the copolymer

Art Unit: 1772

would be well within the teaching of the reference or obvious to one having ordinary skill in the art.

Idlas also teaches that as generally recognized in the art, resin properties may be further modified by blending two or more resins together and it is contemplated that various resins may be blended into individual layers of the multiplayer film or added as additional layers. Such resins include ethylene unsaturated ester copolymer resins, especially vinyl ester copolymers such as EVA, or other esters polymers and polypropylenes (col.16, 1.9-19). These additional polymers are added in order to add or modify various properties of the desired film, to render the film better suited for its intended use, such as heat sealability, interlayer adhesion, shrinkability, shrink force, wrinkle resistance, puncture resistance, printability, toughness, gas or water barrier properties, abrasion resistance, and optical properties such as gloss, haze, freedom from lines, streaks or gels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the disclosed layers by blending the resins such as EVA and polypropylenes with the layers in order to modify the properties of the film to render the film better suited for its intended use, such as shrinkability, puncture

Art Unit: 1772

resistance, printability, toughness, or abrasion resistance, as taught by Idlas.

4. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Idlas (5,759,658) in view of Call (4,756,415).

Idlas teaches all that is claimed in claims 16 and 17 but fails to specifically teach the film for use in packaging a battery. However, Call teaches that it is known to use a shrink-wrap material for wrapping a battery. Typically, this material is a polyethylene (or polyolefin) shrink film (col.3, 1.53-63). Call also teaches that shrink wrap especially of a polyolefin is used for wrapping a battery in order to prevent battery acid leakage during battery storage, handling and installation, and also having the qualities of transparency so that labels and warnings on the battery housing and cover are visible through the packaging and printability so warnings can be provided on the shrink wrap covering material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to use the polyolefin shrink-wrapping film of Idlas for packaging a battery, in order to prevent leakage as well as make the packaging transparent and printable, when polyolefin film



Art Unit: 1772

wrapping material such as polyethylene is already known to wrap batteries as taught by Call.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

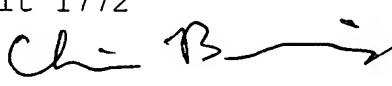
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB

October 25, 2002



  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

10/28/02